

Improving the Detection of *Trypanosoma brucei* in Ugandan Cattle

Trypanosoma brucei sensu lato (*T. brucei* s.l.) is a protozoan parasite that can cause disease in a wide range of vertebrates. Microscopy has been a long-standing diagnostic technique; but accuracy is subject to fluctuating parasitaemia. Molecular techniques have improved diagnostic sensitivity and are capable of detecting infections at sub-clinical levels. These methods include pan-trypanosomal detection, and species-specific reactions of multi-copy and single-copy targets. PCR is the most widely used of the available diagnostic tools for *T. brucei* detection but it is an expensive and resource-heavy technique. Standardising the approach would allow for improved, comparative, detection of disease status; thus encouraging a standard case definition based upon a molecular criteria and improved epidemiological monitoring for disease control. Here, the relative diagnostic capability of three PCR reactions targeting *T. brucei* s.l. were reviewed with assessment of 320 cattle blood samples, stored upon the FTA matrix, from Central Uganda. The findings of this study will be presented and their implications to both the animal and zoonotic members of this parasitic species discussed.